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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,826	09/16/2003	Richard R. Roesler	PO-7938/MD-99-48	2668
157	7590	12/08/2005	EXAMINER	
BAYER MATERIAL SCIENCE LLC			SERGENT, RABON A	
100 BAYER ROAD			ART UNIT	
PITTSBURGH, PA 15205			PAPER NUMBER	
			1711	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,826

Applicant(s)

ROESLER ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 94/19335.

The compound disclosed within Example 117 meets applicants' claimed aspartate structure. Applicants have argued that the amendment specifying that X is a hydrocarbon group distinguishes the instant invention from the prior art. In response, this argument would hold true if X was limited only to a true hydrocarbon group; however, applicants' definition of X clearly provides for the hydrocarbon group containing further functional groups that either are reactive with isocyanate groups or are inert to isocyanate groups. In light of this provision, it is by no means clear that the compound of the prior art is excluded, since the heteroatom structure of the prior art compound contains isocyanate reactive or inert groups.

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3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Squiller et al. ('204 or '704) or Roesler ('195), each in view of Cai ('405) and Mormile et al. ('086).

The primary references disclose aldimine/aspartate compounds, their production, and their use within polyisocyanate based polymeric systems, such as coatings and isocyanate addition products (prepolymers). The aldimine/aspartate compounds are produced by reacting excess primary amine groups remaining on the aspartate with aldehyde. See abstracts and columns 2-9 within Squiller et al. See abstract and columns 1-5 within Roesler.

4. Though the primary references are silent regarding the incorporation of ketimine groups, as opposed to aldimine groups, into the aspartate, the following positions are taken. Firstly, the position is taken that ketimine groups were known to be compatible with aspartates within polyisocyanate based polymeric systems. This position is supported by the teachings of Cai (see abstract) and Mormile et al. (see abstract and column 6, lines 63-66). Secondly, the position is taken that both aldimine and ketimine were known to have similar, if not equivalent, utilities as curatives within polyisocyanate based polymeric systems. This position is supported by the teachings of Mormile et al. (see abstract). Therefore, in view of these positions and the structural and chemical similarities of aldimine and ketimine, the position is ultimately taken that it would have been *prima facie* obvious to substitute ketimine groups for the aldimine groups of the aspartates of the primary references.

5. The examiner has considered applicants' response and the 37 CFR 1.132 declaration, filed September 27, 2005; however, the response is insufficient to overcome the prior art rejection. Applicants essentially argue that due to the difference in manufacturing aldimines and ketimines and the release of more volatile organic compounds by ketimines, as opposed to

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aldimines, that it would not have been obvious to substitute ketimines for aldimines. These arguments are not found persuasive in view of the relied upon teachings of the secondary references. Both Cai and Mormile et al. teach the suitability of using ketimines or aldimines in polyisocyanate-based systems and, therefore, establish their equivalency. See column 4, lines 42+ within Cai. See abstract of Mormile et al. Applicants' arguments in no way negate these teachings of the secondary references; therefore, the response fails to adequately rebut the *prima facie* case of obviousness.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent  
December 2, 2005

  
RABON SERGENT  
PRIMARY EXAMINER